

ABSTRACT

A system and method for self-synchronization of modular production systems having components with various alternative capabilities for processing and transporting work units along transport highways, for various component/transport highway configurations. The method includes determining jobs of interest, with each job requiring the production of at least one work unit. The configuration of the components, including at least one machine module, and the transport highway is determined. Each component duration time is determined and a default self-synchronization time is identified. The default self-synchronization time is optimized by adjusting not less than one component duration time.